

process depending upon a result of the operation and creates a changing game image.

Likewise, the sound processor executes a required sound process depending upon a result of the operation.

5 An internal ROM 96 and a memory cartridge ROM 58 included in the memory cartridge 48 are coupled to the game processor 92 through a system bus 94. Accordingly, the processor 92 can access the ROMs 96 and 58 through the system bus 94, and video or image data for the ball figure 84 and the paddle figures 86a-86d and music data of a plurality of pieces of music aforementioned are read therefrom.

10 Meanwhile, each keys 78, 80, and 82a-82d shown in Figure 11 is inputted in an input port of the game processor 92, namely, an input/output control circuit. A video signal (for forming a game image) and an audio signal (music) from the game processor 92 are applied to a television monitor by way of the AV cable 74 through a video output terminal 98 and an audio output terminal 100.

15 In this embodiment shown, the internal ROM 56 of the karaoke device with built-in microphone 10, the memory cartridge ROM 58 of the memory cartridge 48 and the internal ROM 96 of the ball paddle game device 70 are stored with programs and data as shown in Figure 14. It is noted that contents stored in the internal ROM 56 is the same or similar to that of Figure 3.

20 The memory cartridge ROM 58 is stored with a common start program 58d, a karaoke program 58e, a ball paddle game program 58f, common video data 58g, and common music data 58h. The common start program 58d is started in the device to which the memory cartridge 48 is attached or inserted, and determines whether the device to which the memory cartridge 48 is attached or inserted is the karaoke device with built-in microphone 10 or the ball paddle game device 70. The karaoke program 58e is a program
25 to be executed at a time the device to which the memory cartridge 48 is attached or

inserted is the karaoke device with built-in microphone 10, and executes processing such as start and system initialization, sequence control, image display control, A/D conversion and music processing, music reproduction control, and etc. The ball paddle game program 58f is a program to be executed at a time the device to which the memory cartridge 48 is attached or inserted is the ball paddle game device 70, and executes processing such as start and system initialization, sequence and game rule control, image display control, music reproduction control, and etc.

The common video or image data and the common music data are data available at a time the karaoke program 58e or the ball paddle game program 58f is executed. In other words, in either case that the device to which the memory cartridge 48 is attached or inserted is the karaoke device with built-in microphone 10 or the ball paddle game device 70, video or image data and sound data are generated based on the common video or image data and the common music data. The common video or image data includes music selection screen data and additional background screen data, and the common music data includes music score data (including lyric data and ball appearing pattern) and additional sound source data.

The ROM 96 is stored with a ball paddle game program 96a, ball paddle game video data 96b, and ball paddle game music data 96c. The ball paddle game program 96a is executed at a time the memory cartridge 48 is not attached or inserted, and executes processing such as start and system initialization, sequence and game rule control, image display control, music reproduction control, and etc. The ball paddle game video data 96b and the ball paddle game music data 96c are data available for processing the ball paddle game program 96a. The ball paddle game video data 96b includes title screen data, music selection screen data, ball and paddle image data, frame and icon data, and etc. The ball paddle game music data 96c includes music score (including ball appearing

pattern) and basic sound source data. Accordingly, even if the memory cartridge 48 is not attached to the ball paddle game device 70, although the music and the ball appearing pattern are limited, it is possible to enjoy a game.

The connected state among the high-speed processor 92, the external ROM 58 and the internal ROM 96 is the same or similar to that of Figure 6 and Figure 7. Due to this, when the memory cartridge 48 is not attached to the ball paddle game device 70, the chip enable signal 1 is inputted into the CE input port of the internal ROM 56, and the ball paddle game program 96a, the ball paddle game video data 96b, and the ball paddle game music data 96c read out of the internal ROM 96 are mapped as shown in Figure 15.

More specifically, the ball paddle game program 96a is mapped to an address space that the upper 8 bits indicate "00" - "1F" and the lower 16 bits indicate "FFFF" - "8000", and all the ball paddle game program 96a, the ball paddle game video data 96b, and the ball paddle game music data 96c are mapped to an address space that the upper 8 bits indicate "80" - "9F" and the lower 16 bits indicate "FFFF" - "0000". Since the high-speed processor 92 starts to access from an address space that the upper 8 bits are "00", when the power switch 76 is turned on in a state that the memory cartridge 48 is not attached, the ball paddle game program 96a is first executed.

When the memory cartridge 48 is attached to the ball paddle game device 70, the chip enable signal 2 is inputted into the CE input port of the internal ROM 96, and the chip enable signal 1 is inputted into the CE input port of the memory cartridge ROM 58. At this time, the ball paddle game program 96a, the ball paddle game video data 96b and the ball paddle game music data 96c read out of the internal ROM 96, and the common start program 58d, the karaoke program 58e, the ball paddle game program 58f, the common video data 58g and common music data 58h read out of the memory cartridge ROM 58 are mapped as shown in Figure 16.